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ABSTRACT

Each year, recipients of the Manpower Administration doctoral dissertation grants for manpower researchers discuss their research findings at a conference in Washington, D.C. In addition to serving as forums for the interchange of ideas, these conferences also provide an opportunity for participants to meet their peers and experienced manpower specialists. The conferences also give government manpower people a chance to assess first-hand the capabilities of the new researchers. The 1969 Conference was divided into six working sessions: (1) Professional and Technical Manpower, (2) Mobility and Migration, (3) Urban Labor Market Problems, (4) Work Incentives, Motivation, and Job Satisfaction, (5) Theoretical Labor Market Analysis, and (6) Public and Private Efforts to Alleviate Manpower Problems. The conference program, including 15-minute presentations by the 36 attending grant recipients, is contained in the appendix to the report. (BH)

ED0 42896

REPORT

NEW MANPOWER RESEARCHERS CONFERENCE

NATIONAL MANPOWER POLICY TASK FORCE

October 1969

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VT011333

REPORT

NEW MANPOWER RESEARCHERS CONFERENCE

September 18-19, 1969

Introduction

This report describes the third in a series of Conferences for New Manpower Researchers jointly sponsored by the National Manpower Policy Task Force and the Office of Manpower Research, Manpower Administration, U. S. Department of Labor. As a part of its overall research effort, the Manpower Administration provides doctoral dissertation grants to manpower researchers who have completed their course work for the PhD and are interested in writing a thesis related to the manpower field. In an effort to broaden their perspective on manpower policy issues, each year the recipients of these grants are brought to Washington, D.C., for a conference to discuss their research findings. In addition to serving as a forum for the interchange of ideas the Conference also provided participants an opportunity to meet their peers as well as experienced manpower specialists.

This report describes the objectives and planning mechanism for carrying out the Conference, the general format of the Conference, a summary of the various sessions held and an evaluation of the program.

Conference Objectives and Planning Procedures

The main objective of the New Manpower Researchers Conference is to bring together the recipients of the Labor Department doctoral dissertation grants program to discuss the work they are doing with

their peers as well as to increase their association with other senior manpower people from around the country. It also provides an opportunity for governmental manpower people to better assess the capabilities of these new researchers by meeting with them face-to-face rather than secondhand through written correspondence. Every effort is made to maximize the participation of the new researchers, not only in the form of formal presentations by them, but also through extensive discussion periods in the various working sessions.

The Office of Manpower Research provided the Task Force with a list of forty-four grant recipients who were eligible to attend the September 1969 Conference. Letters were sent to each of these individuals in mid-June briefly describing the anticipated Conference and to determine the interest and availability of the grantees in meeting on the two days selected in September. Thirty-six of this number were in attendance at the Conference as indicated in Appendix I.

An invitation was also extended to those individuals who had participated in the 1968 Conference to attend at their own expense. Although we anticipated that as many as nine of this group might come this year, only four were ultimately able to attend.

In addition to the grant recipients, members of the National Manpower Policy Task Force and two members of the NMPTF Associates participated in the meetings. Four of the five members of the Grants Review Panel who select the doctoral dissertation grantees

were also participants in this year's Conference as well as a number of senior governmental manpower people. As in the prior two conferences, staff people from the Labor Department's Office of Manpower Research were asked to prepare sense of the meeting papers for each of the six working sessions.

Conference Format

The program for this year's Conference closely resembled that of the prior two conferences held in 1967 and 1968 (See Appendix II). The morning of the first day was devoted to a welcoming session and discussion of pending manpower legislation for all the participants of the Conference. In the afternoon of the first day and in morning and afternoon sessions of the second day, the Conference participants divided into two groups (at their discretion) to participate in six working sessions as follows:

- I. A. Professional and Technical Manpower.
B. Mobility and Migration.
- II. A. Urban Labor Market Problems.
B. Work Incentives, Motivation and Job Satisfaction.
- III. A. Theoretical Labor Market Analysis.
B. Public and Private Efforts to Alleviate Manpower Problems.

In each of these six working sessions three grant recipients gave fifteen minute oral presentations describing their research

and outlining policy implications growing from their work. Selection of the general areas to be covered and of the individual speakers within the six areas was dependent upon the subject matter of the grants that had been approved. In the 1967 Conference university advisors of the grantees were contacted to determine the status and quality of their student's work. However, during the second go-round these advisors were not contacted and there seemed to be little difference in the quality of presentation between the two years. As a result, this year's speakers were chosen as they were in 1968 and it was found that research was in varied stages of completion. One of the few negative reports concerning the Conference had to do with a few new researchers' disappointment that some of the speakers were unable to provide more substantive information on their research activities. Each of the speakers prepared a short summary of his research which was given to the moderator and reporter to assist them in better organizing their roles and to the participants so that they might have better information for choosing between varied sessions.

Two luncheons were held with special speakers to discuss major topics of interest. Again this year, a reception was held on the evening of the first day to provide an opportunity for the participants to get to know one another on a more informal basis. One additional element in this year's conference was a panel discussion

"More Effective Implementation of the Grant Program" which offered an opportunity for the grant recipients to discuss some of the mechanics of administering their grants and how they might better carry out their responsibilities, as well as to offer suggestions to Labor Department representatives for improving administrative procedures.

Summary of Activities

The opening session began with Charles A. Myers, Chairman of the Task Force, briefly welcoming the conference participants and introducing Secretary George P. Schultz, who addressed the group. Secretary Shultz outlined the evolution of federal manpower policy and the impact it had had in improving the condition of those who had participated in these activities. He then briefly described the considerable importance of research in effecting policy during this evolutionary period of manpower programs. He suggested that it was important that research be based on solid foundations and expressed optimism that people such as those attending the conference would be able to materially affect future directions in the manpower field.

Howard Rosen, the Director of the Office of Manpower Research, introduced members of the Task Force, Review Panel members and other Department of Labor officials. He then briefly described the total research program carried on by his office and indicated the role of the dissertation grants program. Given the proclivity of many prospective PhD students to finish the course work and then get

bogged down in the completion of a thesis, he suggested that the Labor Department's dissertation grant program had been highly successful in helping students avoid this pitfall. He noted that of the 137 grants that had been awarded, including those of this year, 49 had already finished their dissertations and most of the others were making satisfactory progress toward completion.

He proposed that it might be well to consider two types of research activity. The first, he described as "headline research" or large-scale studies such as the Longitudinal OMR Study, which catches the fancy of researchers because of its esoteric content and far-reaching implications. The other less glamorous, but obviously very useful category, he classified as "operational research." He suggested that this type of activity required hard working men who were willing to get their hands dirty in searching for answers to difficult problems. He noted the importance of applying interdisciplinary approaches to the solution of problems and suggested that researchers should be courageous social engineers and willing to apply their research results to the improvement of manpower programs and policies. He concluded by arguing that social scientists should do more than research for its own sake, but rather evidence a willingness to pragmatically apply the results of their work to the betterment of society.

The remainder of the opening session was taken up with a discussion of Comprehensive Manpower Legislation. Congressman James G. O'Hara and William A. Steiger each summarized their respective bills,

and Malcolm Lovell, Manpower Administrator, outlined the Administration's bill. In the discussion which followed questions were asked about the problems that would be incurred in the employer of last resort concept. Mr. Steiger expressed considerable concern about the effectiveness of this concept in the current political climate and suggested that a new careers approach would probably be more feasible. On the other hand, a question concerning whether upgrading would meet the needs of the disadvantaged prompted Mr. O'Hara to suggest that since his bill offered a public employment provision that could eventually provide a job for all who wanted one, the disadvantaged would be adequately served. Charles Killingsworth of the Task Force noted that decategorization and decentralization which were described as the basis of the Administration's bill were two separate problems and that perhaps it might be better to first make an effort to decentralize and then to do away with the proliferation of individual manpower programs. Mr. Lovell noted that the Administration's bill attempted to meet this problem by the step-by-step 25 percent, two-thirds, and full allocation of state funds to these jurisdictions dependent upon their meeting prescribed performance standards.

The luncheon speaker on the first day was Arnold R. Weber, Assistant Secretary of Labor for Manpower. He spoke on the interrelationships between policy and research in implementing manpower activities. In describing the market mechanism's "invisible hand" as possessing five thumbs he implied that human intervention was

frequently necessary to meet sought after objectives. He then suggested that the basic assumptions behind policy formulation varied depending on the philosophical bent of the policy makers. He noted the importance of research in policy formulation but pointed out that frequently decisions are required before the research results are available. Finally, he outlined three categories of research: (1) adversary, which marshalls data to support or attack an issue; (2) planning and evaluation, which is most appropriate for policy formulation; and (3) "superordinate data," which actually makes policy dependent upon that data, i.e., unemployment statistics, the consumer price index, etc.

In the afternoon of the first day a panel composed formally of Leonard Hausman, NMPTF Associates, and Herman Lasken, the Director of the dissertation grants program and informally including members of the Review Grants Panel, discussed how the dissertation grants program might be administered more effectively. One of the first recommendations concerned the need for improving information about the availability of the grant program. Mr. Lasken noted the lack of success in mailing information to university graduate schools or individual departments and that during the past year they had been more successful in mailing directly to libraries and having information on the grant program posted there instead. It was suggested that using graduate school associations might be helpful in more effectively reaching individual students.

The new researchers were told that the grant on which they operated was actually given to the university and that resolution of problems required initial consultation with the university advisor and going through the university with requests for changes, rather than writing directly to the Labor Department in Washington. It was also mentioned that the Task Force was only peripherally involved in the grants program as a co-sponsor of the New Researchers Conference and that it had no responsibility for dissertation grant administration.

Several of the grant recipients were surprised to find that the thirty to sixty percent overhead they discovered was applied to their own grants was universal throughout the country. Mr. Lasken noted it was often to the advantage of the recipient to have the money given to him in the form of a stipend rather than a salary, since the former was generally not subject to income tax. Details were also given on how renewals and extensions were made. Although an anticipated study might be expected to last for more than one year and the Review Panel might recommend extension beyond the initial year, it is still necessary for the recipient to request another grant for the second year of his study.

Rashi Fein, a member of the Review Panel, as well as a Task Force member, noted that the prime goal of the dissertation grants program was the development of research capability. While the panel attempted to gain some measure of geographical distribution, within given fund limitations it attempted to sponsor those studies

which seemed to be of highest merit. He noted they did all they could to approve a grant, that is, that they attempted to be as positive as they could in assessing individual requests. If a proposal were of high quality as far as the recipient was concerned but the school or sponsor was of less merit that would not impinge upon the grant going to the individual. On the other hand, if there seemed to be some question about the individual, but the sponsor was of high caliber then an effort was made to award the grant in this case also.

The luncheon speaker on the second day was Marvin Feldman, Special Assistant to the Commissioner of Education. He discussed some long-range policies required for developing educational systems that would improve individual employability for those in the middle and lower occupational levels. Mr. Feldman suggested the key might be implementation of a widespread post-secondary or community college system providing a variety of techniques for the development of career potential. He cited the need for developing new opportunities for entry into careers such as developing social workers through New Careers Programs and colleges for craftsmen that would make it possible for blue-collar workers to improve their skills. He outlined the serious problem of out-reach in getting to those who would effectively use the community college, and developing techniques to retain people in the schools once they are recruited since in the past over half of those who enter post-secondary education leave prior to the time they complete

their anticipated program. He suggested that new ways must be developed to assure that the educational experience is a meaningful one for those who need it and that new ways must be determined in providing such education by going into industrial sites, effectively implementing new techniques for teaching the under-motivated, etc.

The summaries submitted by the speakers for the various working sessions are in Appendix III and the reporter's reports are included in Appendix IV.

Conference Evaluation

The Conference accomplished its major objective of providing an interchange of ideas among the conference participants. Several of the grant recipients were enthusiastic about the opportunity of face-to-face meetings with experts in manpower policy and the top Administrators about whom they had heard and read but probably would not have had the opportunity of meeting had it not been for an occasion such as this. Several commented that their perspective was broadened considerably not only by meeting these experienced researchers and Administrators but also with the opportunity of associating with students from other schools and other disciplines.

The problem of selecting papers for presentation at working sessions has already been noted. Some participants indicated that the varying stages of completion of the individual presentations made substantive discussion difficult. On the other hand even if all the reports were completed, it would be difficult to gain enough

information about a topic from a one page summary and brief oral presentations to result in much meaningful discussion. This was further complicated by the attempt to cover three separate topics even though they were closely related. One possible alternative might be the selection of six completed dissertations and inviting two or three new researchers to act as discussants.

One further suggestion made by Howard Rosen would be the bringing together of the Conference participants in a wind-up session to summarize the Conference and close the meetings more formally. The New Manpower Researchers Conference serves a useful purpose not only for the participants but also for Labor Department officials to meet with and review the work of those who are receiving doctoral dissertation grants. It would be well to continue, as one official has indicated in the past, "to make the Conference an annual highlight of the doctoral dissertation grant program."

Appendix I

New Manpower Researchers Conference Participants

(Name, Graduate University, Dissertation Title, Current Address)

A. Bradley Askin, Massachusetts Institute of Technology, The Economic Causes and Effects of Inter-regional Negro Migration; 1917 West Balboa Boulevard, Newport Beach, California 92660.

Ross E. Azevedo, Cornell University, The Labor Market for Scientific Personnel: The Problem of Allocation and Efficiency; 101 Eddy Street, Ithaca, New York 14850.

Michael J. Boskin, University of California, Berkeley, The Working Behavior of the Urban Poor; Institute of Business and Economic Research, University of California, Berkeley, Berkeley, California 94720.

Donald D. Bowen, Yale University, An Evaluation of Motivational Similarity in Work Groups; 6651 Reynolds Street, Pittsburgh, Pennsylvania 15201.

Norbert W. Budde, Washington University, Demand and Training for Dental Hygienists; 6034 Kingsbury, St. Louis, Missouri 63112.

John S. Chase, The University of Michigan, The Contribution of Education to State Economic Growth; Simon Fraser University, Office of the Vice President, Academic, Burnaby 2, British Columbia.

Deborah S. David, Columbia University, Career Patterns and Values: A Study of Men and Women in Scientific, Professional, and Technical Occupations; Bureau of Applied Social Research, Columbia University, 605 West 115th Street, New York, N.Y., 10025.

Charles A. Drake, Michigan State University, Supervision, Technology, and Work Group Behavior; 2724 Hopkins, East Lansing, Michigan.

Ronald G. Ehrenberg, Northwestern University, Overtime Behavior in U.S. Industry; 526 Greenwood Street, Evanston, Illinois 60201.

Stephen R. Engleman, University of California, Berkeley, Cost and Performance Incentives for Job Corps Contractors; Institute of Industrial Relations, University of California, Berkeley, Berkeley, California 94720.

David Lee Featherman, University of Michigan, Social and Psychological Factors in the Process of Occupational and Economic Achievement Among American Fathers; 35 Murray Place, Princeton, New Jersey 08540.

Kenneth Galchus, Washington University, The Measurement of the Elasticity of Substitution of Nonwhite for White Labor; Economics Department, Washington University, St. Louis, Missouri.

John S. Haines, University of Wisconsin, The Effects of Expansion of Technical Knowledge on Productivity; Department of Economics, University of Hawaii, 2540 Maile Way, Honolulu, Hawaii 96822.

John W. Hambleton, University of Wisconsin, Determinants of Geographical Differences in the Supply of Physician Services; 4009 33rd Street, Apt. #3, San Diego, California 92104.

Richard N. Harris, Tufts University, Recruitment and Training Procedures Within the Police Academy and its Implications for Law Enforcement; 40 Park Street, #7, Newton, Massachusetts 02158.

James J. Heckman, Princeton University, An Analysis of the Determinants of Household Labor Force Response to Income and Asset Changes; 227 A. Marshall, Princeton, New Jersey.

C. Russell Hill, University of Minnesota, Labor Force Participation of the Urban Poor; Department of Economics, University of Michigan, Ann Arbor, Michigan 48104.

Margit A. Johansson, Columbia University, The Differential Effects of Reduced Research Funding on University Scientists; Bureau of Applied Social Research, Columbia University, 605 West 115th Street, New York, N.Y., 10025.

Jerry N. Judy, Michigan State University, Occupational Specialization, Chain Migration, and the Assimilation of Mexican Americans into Michigan Communities; Department of Sociology, Michigan State University, East Lansing, Michigan 48823.

Harold G. Kaufman, New York University, Work Environment, Personal Characteristics, and Obsolescence of Engineers; 25 Jones Street, New York, N.Y. 10014.

Albert S. King, Texas Technological College, Managerial Relations with Disadvantaged Work Group: Supervisory Expectations of the Underprivileged Worker; College of Commerce, Kansas State University, Manhattan, Kansas 66502.

Peter Kobrak, Johns Hopkins University, Private Assumption of Public Responsibilities: The Role of American Business in Urban Manpower Programs; 3400 North Frederick Avenue, Milwaukee, Wisconsin 53211.

Stephen D. Kornblatt, Case Western Reserve University, Factors Affecting the Hiring and Training of Hard-Core Unemployed in the Greater Cleveland Area: A Study in Culture Confrontation; 3149 Kensington Road, Cleveland Heights, Ohio 44118.

Frank J. Landy, Bowling Green State University, A Typological Approach to the Relationship Between the Motivation to Work and Job Satisfaction; Department of Psychology, The Pennsylvania State University, State College, Pennsylvania 16802.

Raul Moncarz, Florida State University, A Study of the Effects of Environmental Change on Human Capital Among Selected Skilled Cubans; Economics Department, Louisiana State University, New Orleans, Louisiana.

Ronald J. Oaxaca, Princeton University, Male-Female Pay Differentials in the Philadelphia Metropolitan Area: A Cross-Section Analysis; 407-B Butler Avenue, Princeton, New Jersey 08540.

Vernon Renshaw, Massachusetts Institute of Technology, The Role of Migration in Labor Market Adjustment; Department of Economics, M.I.T., Cambridge, Massachusetts 02139

Roger D. Roderick, University of Illinois, An Organizational Analysis of the Hiring of Engineers; 1010 E. Colorado, Urbana, Illinois 61801.

Dwayne Schramm, University of California, Los Angeles, A Study of the Older Woman Worker Who Has Attempted to Enter or Reenter the White Collar Labor Force Through the Assistance of Community Training Programs in Clerical and Secretarial Occupations; 6035 North Eighth Street, Fresno, California 93726.

Lawrence Slifman, Washington University, Occupational Mobility of Disadvantaged Workers; Department of Economics, Washington University, St. Louis, Missouri 63130.

Richard C. Stapleton, Texas Technological College, An Analysis of Manpower Migration Patterns in the South Plains Region of Texas; College of Business Administration, Department of Management, University of Southwest Louisiana, Lafayette, Louisiana.

Richard S. Toikka, The University of Wisconsin, Supply Responses of the Unemployed; 9 South Bassett Street, Madison, Wisconsin.

Robert B. Wallace, Northwestern University, An Examination and Measurement of the Benefits of Public High School Education in the U.S.; Department of Economics, Boston College, Chestnut Hill, Massachusetts 02167.

Andrew J. Winnick, University of Wisconsin, The Characteristics, Education and Earnings of Technicians and Other Semiprofessional Workers; 1554 Simpson Street, Apt. #3, Madison, Wisconsin 53713.

Donald E. Wise, Claremont Graduate School, Bracero Labor and the California Farm Economy; Department of Economics, Clark University, Worcester, Massachusetts 01610.

Lawrence S. Zudak, Purdue University, A Theoretical Analysis of The Supply and Demand for Labor in the Steel Industry; Economics Department, University of Western Ontario, London, Ontario, Canada.

NOTE: The following individuals were extended invitations to the Conference but were unable to attend for varied reasons.

Norville D. Crowder, Duke University.

Robert J. Flanagan, University of California, Berkeley.

John H. Florer, Syracuse University.

Marvin H. Kahn, Washington University.

Paul Offner, Princeton University.

Catherine A. Palomba, Iowa State University

Nancy B. Tuma, Michigan State University.

Stephen Wollack, Bowling Green State University.

APPENDIX II
CONFERENCE PROGRAM

NEW
MANPOWER RESEARCHERS CONFERENCE

SPONSORED JOINTLY
BY

OFFICE OF MANPOWER RESEARCH
MANPOWER ADMINISTRATION
U. S. DEPARTMENT OF LABOR

AND THE
NATIONAL MANPOWER POLICY TASK FORCE

SEPTEMBER 18-19, 1969

U. S. Department of Labor
14th and Constitution Avenue, N. W.
Washington, D. C.

P R O G R A M
NEW MANPOWER RESEARCH CONFERENCE
SEPTEMBER 18-19, 1969

SEPTEMBER 18 - THURSDAY

10:00-12:00 WELCOMING SESSION

Opening Remarks and Introduction
Charles A. Myers
Massachusetts Institute of Technology

Welcome
George P. Shultz
Secretary of Labor

The Manpower Administration Research Program
Howard Rose
Director, Office of Manpower Research

Issues in Manpower Policy: Comprehensive
Manpower Legislation

Introduction by Sam A. Levitan
Representative James G. O'Hara
Representative William A. Steiger

12:15- 2:00 LUNCHEON

Introduction
Charles C. Killingsworth
Michigan State University

Policy, Administration, and Research in
Manpower
Arnold R. Weber
Assistant Secretary of Labor for Manpower

**2:15- 4:15 SESSION I: PROFESSIONAL AND
TECHNICAL MANPOWER**

Ross E. Azevedo
Cornell University

Deborah S. David
Columbia University

Andrew J. Winnick
University of Wisconsin

Moderator: M. H. Trytten
National Academy of Science

Rapporteur: Catherine E. Christgau

SESSION II: MOBILITY AND MIGRATION

Bradley J. Askin
Massachusetts Institute of Technology

Vernon Renshaw
Massachusetts Institute of Technology

Richard C. Stapleton
Texas Technological College

SESSION II (continued)

Moderator: Michael J. Piore
Massachusetts Institute of Technology

Rapporteur: Jacob Schiffman

**4:30- 5:30 PANEL DISCUSSION: MORE EFFECTIVE
IMPLEMENTATION OF THE GRANT PROGRAM**

Chairman: Leonard Hausman
North Carolina State University

5:30- 6:30 RECEPTION
Room 216
Main Labor Building

SEPTEMBER 19 - FRIDAY

**10:00-12:00 SESSION III: URBAN LABOR MARKET
PROBLEMS**

Michael J. Boskin
University of California, Berkeley

C. Russell Hill
University of Minnesota

Stephen D. Kornblatt
Case Western Reserve University

Moderator: Curtis Aller
San Francisco State University

Rapporteur: Rose Wiener

**SESSION IV: WORK INCENTIVES,
MOTIVATION, AND JOB
SATISFACTION**

Charles A. Drake
Michigan State University

Albert S. King
Texas Technological College

Frank J. Landy
Bowling Green State University

Moderator: Gerald Gurin
University of Michigan

Rapporteur: Robert J. Foster

12:15- 2:00 LUNCHEON

Introduction
Frederick H. Harbison
Princeton University

The Obsolescence of Training

Marvin Feldman
Special Assistant to the Commissioner
of Education

**2:15- 4:15 SESSION V: THEORETICAL LABOR
MARKET ANALYSIS**

Ronald G. Ehrenberg
Northwestern University

Kenneth Galchus
Washington University

Richard S. Toikka
University of Wisconsin

Moderator: Gerald G. Somers
University of Wisconsin

Rapporteur: Richard Seefer

**SESSION VI: PUBLIC AND PRIVATE
EFFORTS TO ALLEVIATE
MANPOWER PROBLEMS**

John S. Chase
The University of Michigan

Stephen R. Engleman
University of California

Peter Kobrak
The Johns Hopkins University

Moderator: Eli Ginzberg
Columbia University

Rapporteur: Ellen Sehgal

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Working sessions will be held in ROOM 102 A-I

Luncheons at the

**ASCOT RESTAURANT
517 13th Street, N. W.
Washington, D. C.**

CONFERENCE PARTICIPANTS

ASKIN, A. Bradley
Massachusetts Institute of Technology

AZEVEDO, Ross E.
Cornell University

BOSKIN, Michael J.
University of California, Berkeley

BOWEN, Donald D.
Yale University

BUDDE, Norbert W.
Washington University

CHASE, John S.
The University of Michigan

DAVID, Deborah S.
Columbia University

DRAKE, Charles A.
Michigan State University

EHRENBERG, Ronald G.
Northwestern University

ENGLEMAN, Stephen R.
University of California, Berkeley

FEATHERMAN, David Lee
The University of Michigan

FLANAGAN, Robert J.
University of California, Berkeley

GALCHUS, Kenneth
Washington University

HAINES, John S.
The University of Wisconsin

HAMBLETON, John W.
The University of Wisconsin

HARRIS, Richard N.
Tufts University

HECKMAN, James J.
Princeton University

HILL, C. Russell
University of Minnesota

JOHANSSON, Margit A.
Columbia University

JUDY, Jerry N.
Michigan State University

KAUFMAN, Harold G.
New York University

KING, Albert S.
Texas Technological College

KOBRAK, Peter
John Hopkins University

KORNBLATT, Stephen David
Case Western Reserve University

LANDY, Frank J.
Bowling Green State University

MONCARZ, Raul
Florida State University

OAXACA, Ronald L.
Princeton University

RENSHAW, Vernon
Massachusetts Institute of Technology

RODERICK, Roger D.
University of Illinois

SCHRAMM, Dwayne
University of California, Los Angeles

SLIFMAN, Lawrence
Washington University

STAPLETON, Richard C.
Texas Technological College

TOIKKA, Richard S.
The University of Wisconsin

WALLACE, Robert B.
Northwestern University

WINNICK, Andrew J.
The University of Wisconsin

WISE, Donald E.
Claremont Graduate School

ZUDAK, Lawrence S.
Purdue University

APPENDIX III

NEW MANPOWER RESEARCHERS CONFERENCE SESSION I: PROFESSIONAL AND TECHNICAL MANPOWER Ross E. Azevedo

The Labor Market for Scientific Personnel: The Problem of Allocation and Efficiency

At the present time, the labor market for scientific and technical personnel appears to be facing a far from perfect future. On the one hand, the demand for scientists and engineers is steadily increasing, while on the other, enrollment of students in these fields has been dropping off. Abstracting from questions of financial inducements or other techniques to attract manpower, the study being undertaken here is trying to look at the labor market--or rather a sample of that market--and asks if there is anything inherent in it which limits its performance. The nature of the answers to this question should lead to suggestions of constructive measures to enable this market to perform more efficiently.

The study posits that the labor market for scientific personnel consists of two levels, one of which may be broken down still further;

- I. The Primary Market
This is the market for the first job after completion of education.
- II. The Secondary Market
 - A. Voluntary Participation
This is the situation where an individual, for any reason, decides his present job is unsatisfactory and seeks employment elsewhere.
 - B. Compulsory Participation
This arises when a layoff (or firing) occurs and the scientist or engineer is compelled to find new employment.

The basic hypotheses being tested are:

- I. The primary labor market operates most efficiently.
- II. The voluntary entry portion of the secondary market would be almost as efficient as the primary labor market.
- III. Compulsory entry into the labor market would be representative of the least efficient level of operation.
- IV. Pervading all three of these markets is the fact that a large force--such as the government--could cause distortions which would additionally limit the efficiency of their operation.

The status of the work on this project could be best described as in the middle stages of arrangement. This means that I am presently finalizing arrangements for interviews to take place in the next few months. This includes the development of a questionnaire and subsequent field testing.

I have also collected a large amount of published data which is to be used as the background or orienting material. This is designed to obtain an initial overview of the market.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION I: PROFESSIONAL AND TECHNICAL MANPOWER

Career Patterns and Values: A Study of Men and Women in
Scientific, Professional, and Technical Occupations

Deborah S. David

We are interested in describing the career pattern differences between men and women in science and engineering, and the differences in their occupational values. Our study is based on the data collected in the 1962 post-censal study of scientific, professional, and technical manpower, including over 36,000 respondents in twelve occupations. 1/

Our findings indicate that most of the women are at the bottom of their professions when compared to the men. They are more likely to work part-time, get lower salaries (for the same amount of work), and have fewer advanced degrees. However, when we look at professional experience, there is no difference; the proportion of men and women in an occupation for any given number of years is the same, with about forty percent in their fields for five to fourteen years. Women do not change jobs any more frequently than do men; two-thirds of both the men and the women have had only one or two employers in their entire professional careers.

We want to raise the question as to whether the career pattern differences that we have observed are due to differences in occupational values, or whether differential career experiences lead some persons, especially the women, to alter their values. Although we are finding value differences between the occupations, there are even greater differences between the men and women within each occupation.

1/

The occupational groups we are investigating are: engineers, chemists, geologists, physicists, other natural scientists, biologists, agricultural scientists, mathematicians, statisticians, psychologists, economists, and other social scientists.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION I: PROFESSIONAL AND TECHNICAL MANPOWER

The Characteristics, Education and Earnings
of Technicians and Other Semiprofessional Workers

Andrew J. Winnick

This project is a study of the classification, education/training, and earnings of technicians. The study basically divides into three parts. First, there is a description and analysis of the role of the technician in our economy. This includes a theoretical discussion that underlies our initial choice of occupations to include under the rubric - technician. These are: designers, draftsmen, surveyors, medical and dental technicians, electrical and electronic technicians, other engineering and physical science technicians, and a miscellaneous category. This part also includes a discussion of the absolute and relative quantitative growth of these occupations.

The second part of the study is concerned with the question of occupational classification. Data from the 1962 Postcensal Survey on Bureau of the Census defined occupational groups of technicians is subjected to four stages of analysis using some original statistical techniques. The first stage attempts to overcome certain problems of reliability and possible occupational mobility in the data. The second stage focuses on the large degree of heterogeneity within occupational groups. The third stage is concerned with the validity of the occupation groups chosen. The fourth stage analyzes certain individuals who for one reason or another were either omitted from the earlier analysis or were eliminated during them.

The final part of the study is an analysis of the relationship between the earnings of technicians (as redefined in the second section of the study) and their education/training, personal, and occupational characteristics. It focuses on the effects of different types and amounts of education/training. This last section of the study also provides an opportunity to test the effects and usefulness of the techniques developed in the second section.

The first two sections are expected to be completed by the time of the conference.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION II: MOBILITY AND MIGRATION

The Economic Aspects of Black Migration

A. Bradley Askin

This study concerns itself with the causes and patterns of Negro migration and with the effects that such migration has. Negro mobility is both examined by itself and contrasted with total migration. An econometric approach is utilized.

The patterns of black migration are studied by developing a single equation model to explain net migration rates and applying 1960 Census data for state economic areas to it. Independent variables selected include possible economic incentives, amenity characteristics of the place, measures of discrimination, and personal relationships.

The effects of migration are studied with a six equation model which treats the migration decision as a predetermined variable. The data comes from the 1/1000 Sample of the 1960 Census; it includes observations on approximately 9000 Negroes over the age of 14. Mobility's effects on income, the number of weeks worked, and type of area in which the residence is located are among the effects looked at.

Policy implications are drawn from the empirical results of the analysis. In particular, two areas of public interest are given some detailed attention: differences between the migration of blacks in the North and South, the influence of welfare on the migration decision and the effects of that decision on transfer payments.

At the present time all of the work has been completed except for a writing up of the results and the drawing of conclusions. Statistically significant differences emerge between black and total migration both with respect to patterns of mobility and the effects thereof.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION II: MOBILITY AND MIGRATION

The Role of Migration in Labor Market Adjustment

Vernon Renshaw

Objective: To analyze the short-run responsiveness of migration flows to varying economic conditions across space.

The principal hypothesis to be tested is the frequently asserted proposition that out-migration from an area is not sensitive to economic opportunities in that area. An attempt will be made to show that if allowance for differences in mobility characteristics of the populations in different areas is made, one will find that out-migration declines when opportunities rise and increases with falling local opportunities.

Method:

Data giving employment change and its components--in and out-migration of workers and dropouts and entrants of workers--for metropolitan areas at yearly intervals from 1960 to 1965 will be used in regression analysis to determine how systematically migrants respond to opportunities as reflected by employment change. Also yearly deviations from the five year trends for these variables will be used to examine migration response to short run fluctuations in opportunities and to control for non-economic influences on trend rates of migration.

Preliminary Results:

When actual migration rates are correlated with employment change, using no controls for area differences in mobility, out-migration appears to have little correlation with employment change, but if deviations from trend are used instead, out-migration is found to respond systematically to employment change. The quantitative response of out-migration, however appears to be less than for in-migration. It is also found that entrants are important short run adjusters to varying conditions over space.

(The data used were compiled from the Social Security Sample File by David Hirschberg of O.B.E.)

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION II: MOBILITY AND MIGRATION

An Analysis of Rural Manpower Migration
Patterns in the South Plains
Region of Texas

Richard C. Stapleton

This study contains an historical overview of the process involved in shifting human resources in the United States economy from the agricultural sector to the industrial sector. A major contention of the study is that such a shift has been necessary in order for economic development to occur.

A major hypothesis of the study was that the migration patterns of rural youths are affected by general growth forces in the overall economy. A second major hypothesis of the study was that a state of disequilibrium is created for rural youths shortly after graduating from high school.

The study contains a survey of 236 male youths who graduated from four rural high schools in the South Plains region of Texas during the years 1953-1963. The responses to the survey reveal how the graduates adapted to their environments with respect to educational and occupational selection and frequency and distance of migration after graduating from high school.

Migration is conceptualized as the pursuit of equilibrium. Data relating to incomes, distance of migration, and number of geographical moves which are provided by the study are cited in support of the conclusion that a post-high school graduation equilibrium was established by the subjects of the study who were over 28 years old at about the age of 28 or 29.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION III: URBAN LABOR MARKET PROBLEMS

The Working Behavior of the Urban Poor

Michael J. Boskin

The primary purpose of this study is to investigate the working behavior of the urban poor in its relationship to poverty, unemployment, work opportunities, and the structure of already existing and potentially new pecuniary and non-pecuniary incentives. We shall attempt to provide quantitative answers to questions such as: What really is the opportunity locus facing the poor in general and specific subgroups among the poor in particular? How have various welfare programs affected work choices? What will be the effect on the income and work effort of the poor of proposed new income maintenance programs, e.g., variants of the negative income tax, family allowances, wage subsidies or graduated minimum wages?

To do this, we will derive econometrically a labor supply curve for the urban poor (disaggregated by age, sex, race and marital status); from this supply curve we will examine the wage-elasticity of labor supply, the non-wage income elasticity of labor supply, etc. The basic method will be to examine a cross section of urban families. An important intermediate step in the proposed research is to develop an equation relating personal characteristics (age, education, experience, etc.) to wages, since published wage indexes are collected by occupational characteristics and, in the absence of a known relation between personal characteristics and occupation, cannot be translated into wages facing individuals. The parameters of this equation will be estimated from a multiple regression of the wages of persons actually working on a set of variables measuring personal characteristics and also on dummy variables for each labor market included in the cross section. The resulting equation can then be used to compute values for the wages facing individuals who are not actually working.

The next step will be to develop labor supply equations based on the imputed wages and other socio-economic information contained in the sample. We will concentrate on the family as the decision-making unit, building up a family or household utility function from the utility functions of the individuals in the household. From these we derive labor supply equations in which the wages facing other family members play an important role.

Once the preceding two states in the research are successfully completed, we will have labor supply equations in which wages play an important role. We will also have information about the distribution of wages by recipients. Combining the two, we can

evaluate the impact of any income supplement program that has a known or predictable effect on wages. For example, in the case of a wage subsidy, if we assume that the wage cost to an employer remained the same after the subsidy (i.e., all of the subsidy is passed on to the employee), then we could calculate the total increment to income as the sum of the increased wages received by those already working and the total wages received by those attracted to employment by the wage increase.

It is hoped that the research outlined above will serve as a useful input to manpower and income maintenance policy concerning the urban poor.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION III: URBAN LABOR MARKET PROBLEMS

The Economic Determinants of Labor Supply for the Urban Poor
C. Russell Hill

This study is a cross-sectional analysis of the supply of labor for those people whose incomes are below the poverty threshold and who live in SMSA central cities. The problem is to construct and test a model which will explain the extent of a poor family member's participation in the labor force. The model developed here is an application of consumer demand theory to the problem of labor supply where the family is taken as the basic unit of analysis. Viewing labor supply decisions as taking place in a family context implies that both the composition and characteristics of the family are important in determining an individual family member's allocation of time between labor and nonlabor market activities. Therefore, both demographic and economic variables will play an important part in the analysis.

Multivariate least squares regression techniques are employed to estimate labor supply parameters for white and Negro married family heads and white and Negro spouses of family heads who live in poverty. Disaggregated survey data is used in this study and is taken from the Survey of Economic Opportunity, a national survey conducted by The Census Bureau for The Office of Economic Opportunity in the Spring of 1967.

A Preliminary test, using a small sample from the survey data, yields the following result for poor white married family heads whose wives are not in the labor force:

$$N = 25.584 - 0.17039W - 0.02889R - 0.00159NW + 2.6463D \quad R^2 = .416$$

(0.05244) (0.00530) (0.00172) (0.58872)

where N = number of weeks spent in the labor force by the family head, W = average return to labor force activity for the head, R = family income from transfer payments, NW = family's net worth and D = number of dependents of the family head under the age of 20. Other variables, whose effect on the poor's labor supply will be investigated in this paper, are educational attainment, occupation and health of the head and spouse, family income from assets and geographical location of the family.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION III: URBAN LABOR MARKET PROBLEMS

Factors Affecting the Hiring and Training of
Hard-Core Unemployed in the Greater Cleveland
Area: A Study in Culture Confrontation

Stephen D. Kornblatt

The basic objective of this dissertation is to obtain information about the philosophical, organization and attitudinal frameworks within which different companies operate and to analyze that information as it relates to employees drawn from the ranks of the so-called "hard-core unemployed."

The analysis will search for conditions, attitudes, policies and/or procedures revealed by the nature of the company in relation to size, product, location, etc., the organization structure of the firm, the executive hierarchy, the managerial staff, the labor force, and, if applicable, the existing union organization. It will be determined which of these factors or combination of factors positively correlate to the decision, conscious or unconscious, of the "hard-core" employee to remain in or leave the labor force.

I am hypothesizing that the multifaceted problems encountered by the industrial sector of the economy as it confronts this basic social dilemma of joblessness-compounded by a deep chasm of human alienation-can be studied and explained in large measure by what we shall call a "culture confrontation."

This confrontation is the result of a variety of forces, forces that condition human behavior at both the individual and institutionalized "role" level. We will, ultimately, be suggesting that the greater the effort to deal with culturally alienated individuals (that is, alienation from the traditionally defined middle class American ethos) on a human, personal level rather than through a role oriented, label-placing perspective, the greater will be the chance of successfully reaching a reconciliation of the conflicting cultures and thus a remedying of the resultant social upheaval.

It is suggested that the forces giving impetus to this "confrontation" include:

a. an alienation from the legitimate wealth of the country that is shared both by the materially solvent due to their criminal and seemingly anti-social behavior;

b. the variety of concepts of social responsibility subscribed to by the American industrialist-concepts enhanced by or weakened

by his perception of himself as a member of the human race and by his image of himself as fitting into a labeled, classified and categorized slot of the industrial and social world.

c. attitudes formed by the impingement of values that are present in our social class structure;

d. attitudes that are reinforced by racial and ethnic identification;

e. the environments created by the divergence of values surrounding our economic system, the conditions inherent in poverty, sustained by social class, and magnified by discrimination which encourage differences in language, customs, values, morals and motivational attitudes.

It is therefore suggested that all of these factors create a pluralism of attitudinal cultures, and that these disparate value systems must become reconciled and adjusted to one another, at least within the industrial environment, before the hard-core unemployed can be comfortably absorbed into the American labor market.

We are suggesting that the probability of success in hiring and maintaining hard-core unemployed in American industry is directly related to the degree that industry, through its policies and procedures, confronts in a personal and emotional way, the differences in attitudes and behavior which are generated by the direct conflict of subcultural differences in values and norms.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION IV: WORK INCENTIVES, MOTIVATION, AND JOB SATISFACTION

Management, Technology, and Behavior of Work Groups

Charles A. Drake

This paper will discuss the relationship between styles of supervision and technology upon the character of work groups. Development of the following hypotheses will be discussed giving special attention to problems of conceptualization and measurement, however the research has not progressed far enough to allow for any conclusions to be drawn at this time.

Hypotheses:

- 1) The greater the amount of person specialization the stronger the negative association between
 - a. "aggressive authoritarian" style of supervision and job satisfaction
 - b. "aggressive authoritarian" style of supervision and organizational goal identification
 - c. "aggressive authoritarian" style of supervision and integration of the work group
- 2) The more repetitious the nature of the task, of individual members within the work group, the less likely we are to find an association between
 - a. style of supervision and job satisfaction
 - b. style of supervision and organization goal identification
 - c. style of supervision and integration of work group
- 3) The more precisely work load and performance can be measured within the work group, the less likely we are to find an association between
 - a. style of supervision and job satisfaction
 - b. style of supervision and organization goal identification
 - c. style of supervision and integration of work group

In summary, the theoretical and practical significance of the work will be discussed along with some tentative suggestions for further research.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION IV: WORK INCENTIVES, MOTIVATION, AND JOB SATISFACTION

Managerial Relations with Disadvantaged Work Groups:
Supervisory Expectations of the Underprivileged Worker

Albert S. King

This study explores the effect of management expectations with experiments in which supervisors were led to believe at the beginning of an employment relationship that certain of their employees could be expected to show considerable working and/or training improvement during the course of employment. Supervisors were told that predictions as to a given individual's probable work-training performance were based on tests administered to disadvantaged groups prior to their assignment to supervisors for training. The individuals designated as having high aptitude potential were chosen at random and their selection bore no relationship to the actual test results. The general hypothesis was that progress and performance tests and other measures of job success during and upon completion of training would indicate that the randomly selected and designated trainees would improve more than the undesignated others comprising a control condition.

Results of the role of supervisory expectations as determinants of worker performance are reported for five different organizational and occupational settings: MDTA training courses for Welders, Auto Mechanics, and Presser Machine Operators; Neighborhood Youth Corps training for Nurse Aide; and company vestibule training for Electronic Assemblers. Supervisors in the five training situations rated trainees and responded in interviews with more favorable attitudes and evaluations toward workers designated as having high aptitude potential. This was accounted for by surrounding Hawthorne and/or halo influences of the experimental design. Worker performance in three MDTA classes were interpreted (where objective measures for trainee performance were applied) as a function of supervisory higher expectations for such performance. Similar evidence for the results of nurse and electronic assembler training was not obtained.

Results of the study are reported and analyzed as being another case of interpersonal self-fulfilling prophecy paralleling previous discussions by Rosenthal (1966) and explained in terms of a conceptual theory of expectancy influence and role behavior.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION IV: WORK INCENTIVES, MOTIVATION, AND JOB SATISFACTION

A Typological Approach to the Relationship
Between the Motivation to Work
and Job Satisfaction

Frank J. Landy

The purpose of the research was to determine if typal analysis would lead to an efficient description of the relationship between job satisfaction and the motivation to work. There were two major objectives: 1) to determine if motivation types and satisfaction types could be matched, and, 2) to see if various types would be characterized by differing lengths of time in the profession.

The subjects were 175 engineers from six different organizations. A single occupation was chosen in an attempt to control for reward system. The subjects completed a satisfaction inventory comprising the Job Descriptive Index and a 43 item form. They also answered questions dealing with work history. Their coworkers rated them on seven work motivation scales and six performance scales.

The satisfaction inventory was cluster analyzed and yielded the following dimensions: Advancement, Ethical Principles, Creativity, Pay, and Working Conditions. Factor and cluster analyses of the motivation scales yielded three dimensions: Professional Identification, Team Attitude, and Task concentration. Similar analyses of the performance scales yielded three dimensions: Problem Weighting and Communication of results, Use of Personnel Resources, and Personal Ethics.

Satisfaction typing yielded 15 distinct types comprising 163 subjects. Motivation typing yielded 13 types comprising 171 subjects.

Far too many types emerged for a meaningful analysis of the complementarity between motivation and satisfaction types. On the basis of the several analyses performed on the data, the following conclusions were drawn:

1. Knowledge of an Engineer's motivational type does not seem to enable one to predict that engineer's satisfaction pattern.
2. Certain satisfaction types do seem to be characterized by differing lengths of service to the profession; length of service does not seem to be related to motivation pattern.
3. In the present sample, motivational type seems to act as a moderator of the relationship between satisfaction and performance.

While the typological procedures employed did not support the major proposals of the research, subgrouping as a basis for showing the relationships between attitudes and behavior does show some promise.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION V: THEORETICAL LABOR MARKET ANALYSIS

Overtime Behavior in U.S. Industry

Ronald G. Ehrenberg

A rational manpower policy must seek to create jobs as well as to provide training for unemployed workers. The creation of new jobs has been hindered, however, by the observed tendency of employers to substitute overtime for additional employment. A primary cause of this substitution may be the growing importance of fringe benefits and other "quasi-fixed" employment costs relative to the overtime premium. Our work seeks to test this hypothesis, as well as to ascertain other determinants of overtime behavior. Implications for manpower policy, such as whether the overtime premium should be increased (as a means of increasing employment) in specific industries for specific size classes of establishments will be drawn.

The empirical work utilizes multiple regression techniques in an attempt to explain intraindustry cross-section variations in observed overtime hours per man, with individual establishments as the units of observation. The data used is based upon a sample of approximately 1,100 manufacturing and 2,500 non-manufacturing establishments, and is derived from unpublished data released to us from the Bureau of Labor Statistics survey of "Employer Expenditures for Selected Compensation Practices, 1966". To date, only the manufacturing data has been analyzed and the relevant results may be summarized as follows:

1. In the majority of the two-digit manufacturing industries (12 of 16) for which sufficient data is available to conduct the analysis, overtime hours per man are significantly positively related to the ratio of the "fixed" costs to the overtime wage rate.
2. The relationship is not invariant, within a two-digit industry, across establishments of different sizes. Moreover, the relationship does not generally vary in the systematic way that might be expected.
3. Unionized firms do not exhibit markedly different behavior than nonunionized firms in the same industry.
4. A rough maximum estimate of the percentage increase in employment that would result if the overtime premium were increased to double-time from time-and-a-half is obtained by making the poor assumption that total manhours demanded would remain constant if the overtime premium were raised. In the majority of the industries, the resulting estimated increase in employment is in the order of one to three percent.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION V: THEORETICAL LABOR MARKET ANALYSIS

The Measurement of the Elasticity of Substitution
of Nonwhite for White Labor

Kenneth Galchus

The primary purpose of this project was to determine the intensity of racial discrimination on the part of both employers and employees, within various occupational categories. Given this information it was then possible to obtain estimates of the elasticity of the derived demand curve for nonwhite labor in each of these occupations.

The elasticity of substitution of nonwhite for white labor was taken to be a measure of the degree of racial discrimination within each of twenty-one occupational and sub-occupational classifications. The elasticities, in turn, were estimated through the use of a cross-section regression analysis, with the 1960 Census of Population providing the primary source of data.

I found no evidence to indicate that the elasticity of substitution of white for nonwhite labor is anything but infinite. This would seem to indicate that employee discrimination, in those firms where nonwhites are employed, is nonexistent. Moreover, given the likelihood of factor price equalization, the possibility of an earnings differential caused primarily by a discriminatory preference on the part of employers does not seem at all probable. In view of these findings, I can only conclude that the earnings differentials which one does, in fact, observe are the result of quality differentials, which, in turn, may well be the result of past discrimination. In addition to these preliminary results, the derived demand curve for nonwhite labor was observed to be much more elastic than its white counterpart, as one may well have expected.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION V: THEORETICAL LABOR MARKET ANALYSIS

A Proposal to Evaluate Post-Layoff Experiences of Displaced Workers

Richard S. Toikka

The question we propose to consider is what factors influence the re-employment success of workers involuntarily separated from their jobs. Our indicators of success are 1) the probability of job acceptance per period of search and 2) the change in wage level between the job held prior to lay-off and the first job accepted after lay-off. We hypothesize that these two indicators are functions of 1) the tightness of the labor market (or more precisely the excess supply or demand for labor), 2) personal characteristics of job seekers such as age, sex, and education, 3) adjustments to the market such as mobility and asking price decisions and 4) method of search activity.

These hypotheses will be tested on data gathered in surveys of displaced workers in the defense sector and made available to me courtesy of the Arms Control and Disarmament Agency and the University of Colorado.

To estimate the probability of job acceptance per period we use a series of binary variables for each individual, one for each of the periods during which he was in the market. For example, if a man searched for t periods and found a job, $t-1$ variables with value 0 and one variable with value unity would be introduced. If an individual searched for t periods and was not successful in finding a job, t variables with value zero would be used. There are, however, some limitations on this method which I shall discuss in my presentation.

To proxy for the tightness of the market the area unemployment rate will be used. Personal characteristics such as age, sex, and education will be coded and entered as explanatory variables. Binary variables will be used to denote change in occupation or area of residence and also the method of search.

Multiple regression techniques will be used to estimate these functions.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION VI: PUBLIC AND PRIVATE EFFORTS TO
ALLEVIATE MANPOWER PROBLEMS

THE CONTRIBUTION OF EDUCATION TO ECONOMIC GROWTH
IN THE STATE OF MICHIGAN

John Stanley Chase

This study presents an analysis of the relationship of education to economic growth in Michigan and a description of migration patterns of the graduates of representative Michigan public universities. The methodology for the analysis of the relationship of education to economic growth is similar to that used by Edward Denison in his study of the United States economy, but several changes were necessitated by the nonavailability of certain types of data on a state by state basis. These methodological differences coupled with economic and educational differences between the United States and Michigan resulted in the unexpected finding that education (when analyzed in the manner employed in this study) made a fairly insignificant contribution to economic growth in Michigan over the period examined. The aspect of the study related to the migration patterns of university graduates originally was undertaken on the assumption that the contribution of education to economic development in Michigan would be large and therefore the retention or loss of the most highly educated would have direct relevance and measurable impact upon economic development. When the relationship of education to economic development turned out to be less than expected, the migration data were analyzed for their own intrinsic value. As a result, the two major sections of the study dealing, respectively, with education's contribution to the economic growth of Michigan and with the migration patterns of university graduates have fewer interrelationships than was expected at the outset. Indeed, in many respects, each stands alone.

The ways in which education contributes to economic growth and an assessment of selected methodologies used to measure the contributions was undertaken. From among those methodologies assessed, a "returns from investment in education" approach was selected as best meeting the purposes of this study. This use of income differentials as a basis upon which to measure the contribution of education to economic growth rests on the assumption that differences in average income among education groups furnish an adequate measure of differentials in the average contribution to production made by the individuals comprising them. Utilizing such an approach, education was found to have contributed 5% of the increase in Michigan's share of the national income over the 1930-60 period and was projected to provide 7.5% during the 1960-80 level. These results diverged sharply from Denison's findings at the national level: 23% for 1929-56 and 19% for 1960-80. While methodological differences accounted for half

of the differential, presumably significant differences in the rates of change over time in the educational levels of the Michigan and United States populations had only an insignificant effect on the contribution of education to economic growth. This raised the question of whether this methodology was effectively measuring the contribution of education to economic growth.

The migration issue was reviewed from two different perspectives. First, the State's overall migration pattern for the 1950's was summarized. Second, approximately 4700 questionnaires were mailed to selected 1951-1961 graduates of six public institutions in Michigan. Graduates were sampled by field and degree level. The questionnaire was designed to elicit three kinds of information from the respondents: 1) demographic data, 2) attitudinal data as reflected in preferences for residing in Michigan and perceptions of Michigan as a place in which to live and work, and 3) actual migration patterns subsequent to earning the degree. Significant differences were observed among the respondents when controlled by institution, field of study, level of degree, and student residency status. While a number of variables were interrelated, the decision of whether to remain in Michigan was heavily influenced by the ability of the respondent to find a satisfactory job in Michigan.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION VI: PUBLIC AND PRIVATE EFFORTS TO
ALLEVIATE MANPOWER PROBLEMS

Cost and Performance Incentives for Job Corps Contractors

Stephen R. Engleman

Under the Economic Opportunity Act of 1964, the Office of Economic Opportunity was authorized to create residential Job Corps Centers whose administration and operation was to be undertaken by private corporations and non-profit institutions, as well as by certain public agencies. The Cost-Plus-Fixed-Fee contractual arrangements generally employed by OEO and its private contractors do not contain the same automatic incentives for efficiency which normally exist under a private enterprise system.

The basic hypothesis of this dissertation is that there exists an appropriately structured incentive system, which, if employed, would result in improvements both in cost and performance in the Job Corps centers.

There will be two major parts to the dissertation. One will deal with the nature of the incentive system itself. There are several different types of incentive systems already employed, for example, by the Department of Defense. These existing ones, as well as possible new ones, will be evaluated to find the appropriate type within the technological and institutional setting of the Job Corps.

The other, more significant and lengthier portion of the dissertation will deal with the question of how one measures performance in a manpower program in general, and the Job Corps program in particular. For without measurable criteria, there can be no incentive system.

Performance of the contractors is to be largely measured by the performance of the corps members. Recall that the purpose of the Job Corps is to provide the corps member with the academic and vocational training, as well as the work habits and attitudes, which will enable the corpsmen to get and retain a job.

To be meaningful, the criteria must be such that they can be influenced by the contractor and readily evaluated. This, however, is not an easy specification to meet. Gains in reading skills, for example, can be measured by standardized tests, and the increases over time noted. Is a jump from reading at a fifth grade level to the eighth grade a comparable achievement to a jump from a first grade level to a fourth grade level? What about simply looking at job placement. Is that a good measure? Consider the poor black from Mississippi who goes off to Utah, raises his reading and math levels considerably, does admirably in his vocational training as an

automobile mechanic, and then returns to an area where he is unable to find employment in his field. Should this "failure" be attributed to the contractor, who, under the present system, has no responsibility for job placement? What if this same Job Corps graduate then obtains employment as a dishwasher? Is he now counted as a success? What of the boy from Georgia who is sent to Michigan and cannot adjust to the climatic change? He leaves in less than thirty days. For purposes of rewarding or penalizing the contractor, how is he to be distinguished from the other corps members who leave early because of unsatisfactory performance on the part of the contractor.

With the solution of the criteria problem, the more mechanical problem of selecting the appropriate form of incentive system and the weights to be attached to the different criteria, can then be fruitfully attacked.

NEW MANPOWER RESEARCHERS CONFERENCE
SESSION VI: PUBLIC AND PRIVATE EFFORTS TO
ALLEVIATE MANPOWER PROBLEMS

Private Assumption of Public Responsibilities:
The Role of American Business in Urban Manpower Programs

Peter Kobrak

a. The Problem

In recent years, as governmental programs have increased in size, cost, and the number of Americans directly and indirectly affected, administrators have found themselves under increasing pressure to evaluate their programs more carefully. In response to these demands, social psychologists, economists, and administrative analysts have developed and refined a number of useful research techniques. At the same time, because of the predominance of these disciplines, program implementation has received far less attention than program formulation or policy planning.

The need for more knowledge about program implementation at the local level is particularly great in the case of the Job Opportunities in the Business Sector (JOBS) program. Under the JOBS plan cooperating companies are requested to provide training and offer employment to hard-core unemployed workers. In exchange the companies receive from the government whatever costs they incur in providing such additional training and services beyond those required by the typical new hire. The program is administered by the National Alliance of Businessmen (NAB), a group of prominent corporate executives appointed by the President. NAB has a widely publicized goal of placing 500,000 hard-core unemployed workers in jobs by June 1971.

b. The Objectives

The objectives of this political science study are both substantive and methodological, and can be summarized as follows:

1. To evaluate systematically the social and political impact of the JOBS program as the private sector assumes a new role in the public sector.
2. To develop an approach to evaluation of program implementation which will allow the assessment and readjustment of program elements in a successful combination--in accord with the goals of the program, the needs of the trainee, and the requirements of the employer.

c. The Procedures to Be Used

Norton Long some years ago proposed that the local community might best be viewed as an "ecology of games". This polity of a community, like its economy, is a product of a history rather than the imposed effect of any central nervous system. "Insofar as conscious rationality plays a role, it is a function of the parts rather than the whole. Particular structures working for their own ends within the whole may provide their members with goals, strategies, and roles that support rational action. In playing his role, calculating his goals, and subsequently plotting his strategies and tactics, each actor is pursuing his particular 'game'."

Programs, as well as communities, may be viewed as a social system of interacting and interrelated groups and individuals. Manpower programs lend themselves particularly to such an analysis, because they are so heavily dependent upon the voluntary cooperation and active assistance of outside groups, as well as the coordination of federal, state, and local manpower agencies. The JOBS program must thus be seen as a continual process of countervailing group pressures and programmatic feedback. The considerable evolution of the NAB approach since the inception of the JOBS program represents a significant adjustment, if not a transformation, of the original program.

Interviews are currently being conducted with the following group actors within the JOBS program: the executive goal-setters, personnel supervisors, foremen, trainees and related public and private manpower agency officials. The interviews are designed to examine both general attitudes toward the program on a comparative basis and the particular relationship of each group to the program.

APPENDIX IV

NEW MANPOWER RESEARCHERS CONFERENCE

SESSION I: PROFESSIONAL AND TECHNICAL MANPOWER

Reporteur - C. Christgau

The first of the three presentations in this session, moderated by Dr. M. H. Trytten, was made by Ross E. Azevedo of Cornell University who discussed the initial work on his study directed toward finding out how the labor market for scientific and technical personnel could be made more efficient and provide better utilization of scarce manpower. His research has not yet progressed to the point where firm conclusions can be reached. The criteria he is using are concerned with behavior in the labor market rather than economic factors. His hypotheses include: (1) the market for persons going into their first job after completing their education probably operates most efficiently. (Employers involved are usually large firms who often recruit at schools), (2) people looking for subsequent jobs make a relatively poor search, and (3) the market operates least efficiently for the involuntary participant. This study is concerned with such subjects as the kind of search made by workers in the primary and secondary markets, employer recruiting practices, the increasing role of employment agencies, the existence of price competition for scarce personnel, and the distortive effects of government contracts on the labor market--particularly for occupations where the government is a dominant direct or indirect employer, physicists for example.

In the discussion that followed Mr. Azevedo outlined some of the criteria he expects to use to measure the efficiency of the labor market. Among the other relevant points brought out in the discussion was that there are likely to be different employer recruitment practices when hiring for a short term than for the long run. Some comments were also directed to how unions and hiring for training programs might affect employer practices and the dispersion of wage rates.

Deborah S. David of Columbia University outlined some of the more interesting findings from her analysis of career pattern and values of men and women in 12 science and engineering occupations generally sex-typed as male jobs. She found that while there was no difference in the number of years of education or in the number of years worked either in a given field or for a given employer, most women are at the bottom of their profession both dollar-wise and position-wise. Men, she found, were more likely to consciously plan their careers, to have advanced degrees, to work a full year, and to put in overtime on their jobs.

Her hypotheses that differences in career pattern result in part because women's values are different than men's, that they are culturally inculcated and acquired before women enter the job market were supported by an analysis of workers' ratings of various occupational values. Men for instance more frequently give highest value to creative work, women to "helping others." Since success in the occupations studied is more likely to be associated with intellectual values (rather than people-oriented ones), she has concluded that women's relatively inferior position is not merely a matter of discrimination but is also affected by differences in occupational values.

The discussion that followed was concerned mostly with a description of her methodology, and the potential of comparing women who have succeeded in advancing in these occupations with those who have not - the next stage of her research.

Mr. Andrew J. Winnick of the University of Wisconsin reported that work to date on his study of technicians has largely been devoted to overcoming problems of unreliability and heterogeneity in the 1962 post-censal survey data he will use to analyze the characteristics, education, training and earnings of specific classes of technicians. He found, based on comparison of responses to the 1960 census with those in the 1962 post-censal survey and an analysis of job activities reported under various occupations, an extremely high percentage of unreliable responses -- over 1/3 for each of the classifications of scientists, engineers, and technicians. Mr. Winnick described his procedures for eliminating such responses from his study group as well as some 6 to 14 percent of the individuals in each occupational group whose job activities were so disparate as to distort results. He expects the study will provide the basis for recommendations of minimum standards for successful training that may be useful in increasing MDTA's training activity in these fast growing technician occupations.

Mr. Winnick's presentation evoked discussion on the desirability of excluding such a large portion of responses as too disparate in view of the high degree of heterogeneity in technicians' training and use and in the overlapping functions of different occupations. It also opened up discussion of some of the well known limitation of the census data on occupations and how they might be improved.

Among the more general comments was Dr. Trytten's reference to the report of the Commission on Human Resources and Higher Education to be published by the Russell Sage Foundation about mid-November which contains material pertinent to all 3 papers and Dr. Myers' commendation of these grantees for choosing subjects in important though relatively unpopular areas of manpower research.

NEW MANPOWER RESEARCHERS CONFERENCE

SESSION II: MOBILITY AND MIGRATION

Reporteur - Jacob Schiffman

Several areas of agreement and disagreement emerged in the discussion period. There was a general agreement that there was considerable disagreement in the findings of researchers on migration even among those using very similar techniques and data. There was also agreement that migration was one of the areas where analysis was very limited by the availability of data.

Disagreements were expressed as to the utility of those few available sources of "current data." The discussion on the limited availability of data soon evolved into one on the techniques that the conference researchers had used in the face of this difficulty, the wisdom of their selection of particular variables, their use of proxies, their utilization of tests for statistical significance, etc. The discussion then evolved into one of the merits and demerits of econometric and other techniques of analysis. (Here there was a very high correlation between age of discussants and points of view.)

One of the issues on which there was complete agreement (or at least no voiced disagreement) was on the desirability of longitudinal studies of migration and work experience.

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SESSION III: URBAN LABOR MARKET PROBLEMS

Reporteur - Rose K. Wiener

This session was concerned primarily with the methodology to be used in developing models to explain the labor force behavior of the urban poor and to develop improved company procedures for integrating the hard core unemployed into the regular labor force. None of the speakers had had an opportunity to go much beyond the development of theoretical models and proposed analytical procedures so the discussion was centered on basic assumptions and methodology.

Both C. Russell Hill of the University of Minnesota and Michael J. Boskin of the University of California proposed to utilize data from the 1967 Survey of Economic Opportunity of the OEO to develop and test their model; of factors determining labor supply among urban poor. Working quite independently, they had concluded that price and consumer demand theory could be effectively utilized in studying the labor force behavior of the poor. They agreed also that such behavior must be viewed in the context of the family unit, family income from all sources and family consumer demand. Both agreed that standard measures of labor force participation overstated the supply of the poor in the labor force, failing to account for part time and part year work. Both agreed wage rates were an unsatisfactory measure of return on labor force activity. They thought a better measure was average earnings for periods that included unemployment and layoff as well as employment. They plan highly disaggregated analyses of the personal characteristics of the individuals in the sample in relation to labor force activity. Mr. Boskin suggested that sufficiently sophisticated models could be developed to make it possible to test the potential impact of various forms of income maintenance or supplement on labor force participation. He thought that as a result it would be possible to develop measures of aid that would not prove to be massive disincentives to work.

Stephen D. Kornblatt of Case Western Reserve was still in early stages of his study of Greater Cleveland industries and their success, failure or nonparticipation in programs to hire and train the hard core unemployed. Mr. Kornblatt suggested that the "philosophical, organization and attitudinal framework" within which different companies operate strongly affect the results and he planned to seek measures which should be taken to reach a "reconciliation of the conflicting cultures" of firm and disadvantaged workers. He felt that it might be feasible to develop guidelines that companies could follow that would lead to profitable

and successful results and thus induce firms to accept more responsibility for integrating the hard core unemployed into the work force.

Lively discussion indicated that there were substantial differences among those present in their view of the operations of the labor market. Among questions raised were some concerning the adequacy of the definition of labor supply and wage returns, the effect of the dispersion of wage rates and relative size of wage rates on labor force decisions and on the possibility of disequilibrium in the labor market.

Dr. Eli Ginzberg questioned the need for studies such as Mr. Kornblatt's on the ground that we have been highly successful in integrating workers from different cultures into the labor market. He cited findings in a survey of Appalachian migrants to Cleveland showing 80 percent had made a successful adjustment to the labor market. Other participants supported Mr. Kornblatt's views. Lack of time cut short further discussion.

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SESSION IV: WORK INCENTIVES, MOTIVATION, AND JOB SATISFACTION

Reporteur - Robert J. Foster

All three of the studies emphasized the complexity of relationships between attitudinal-motivational dimensions and behavior. Drake and Landy examined the influence of specific moderator or "conditional" variables, Drake focusing on task demands associated with technology and Landy focusing on person typologies.

Although it was not explicitly stated, the questions as well as the papers, implied a need for experimental designs to go beyond examining simplistic, over-generalized relationships independent of other relevant variables. Questions directed toward King's findings that performance varied with supervisor's expectations, especially, drew attention to the complexity of the processes that underlie any observed relationship. Audience questions, for example, suggested that better performance might be attributed to diverted efforts of the supervisor rather than cues stemming from supervisor's expectations and perceptions. Size of group, supervisor attitudes, and the nature of the task were also noted as possible conditions which could influence results.

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SESSION V: THEORETICAL LABOR MARKET ANALYSIS

Reporteur - Richard G. Seefer

Mr. Galchus' principal conclusion--that earnings differentials between whites and nonwhites are the result of quality factors and are not primarily due to discriminatory practices by employers--led to considerable commentary concerning the selection of variables and interpretation of findings. Some researchers felt that the findings suggested the absence of discrimination in employment of nonwhites and that to avoid possible misunderstanding--which seemed to be reflected in some of the questions--more stress might have been placed on the study's relatively narrow concept of discrimination. Other persons felt that Mr. Galchus should have examined other indicators of discrimination since they might have shown different results (for example, discrimination in layoffs) while other questions related to the appropriateness and sensitivity of the proxies that were chosen to represent quality factors, such as educational attainment (which as Mr. Galchus pointed out could very well reflect patterns of past discrimination).

Mr. Toikka's study--dealing with the factors influencing the re-employment success of laid-off defense workers--led to comments concerned mainly with the variables to be selected (the investigator being in an early stage of his study) and the statistical methodology to be employed in evaluating the effect of various factors. For example, the moderator suggested that in measuring the condition of the labor market over time an alternative measure to the local unemployment rate might be based on data from the employment service office, such as the ratio of the number of registered job seekers to the number of unfilled job orders.

Mr. Ehrenberg's paper was concerned with the use of overtime by employers as a substitute for new employees, especially as the former represented a possible cost saving over fringe benefits (regarded as fixed costs). Like other papers, questions dealt largely with the selection of proxies and how best to resolve the problem of theoretical data requirements with actual available statistics. With respect to the manufacturing sector, the investigator found that only 4 of the 16 two-digit industries failed to show a significant positive result in the ratio of fixed costs to overtime premium pay. One of these was the transportation equipment industry, and although this was somewhat surprising, Mr. Ehrenberg suspected it was probably due to the aggregative and heterogeneous character of this industry group (comprising three dissimilar industries, automobiles, aircraft, and shipbuilding).

NEW MANPOWER RESEARCHERS CONFERENCE

SESSION VI: PUBLIC AND PRIVATE EFFORTS TO ALLEVIATE MANPOWER PROBLEMS

Reporteur - Ellen Sehgal

The moderator for the session was Dr. Eli Ginzberg of Columbia University.

The first presentation was given by John S. Chase on his dissertation "The Contribution of Education to Economic Growth in the State of Michigan." Mr. Chase pointed out that Michigan was losing more of its college educated population to other states than it was gaining. If it wanted to retain this group, the State would have to seek to increase employment opportunities; the converse is that for further economic expansion, Michigan has access to highly trained manpower which is not now being adequately reached.

As a result of his research, Mr. Chase was skeptical of current procedures used to measure the contribution of education to economic growth.

The second report, "Cost and Performance Incentives for Job Corps Contractors" by Stephen R. Engleman, dealt with the inadequacies of the cost-plus-fixed-fee contractual arrangements currently used by the Job Corps, and the potential benefits of an incentive type contract. Difficulties in evaluating performance criteria were pointed up. When it was suggested during the discussion that an incentive structure could not be developed, Mr. Engleman replied that he would attempt to set up reasonable measures and a program that looked as if it would work; but, of course, the incentive system could not be tested until it was tried.

The third presentation was given by Peter Kobrak on his study, "Private Assumption of Public Responsibilities: The Role of American Business in Urban Manpower Programs." For his analysis of the JOBS program, Mr. Kobrak makes the assumption that there are common group attitudes such as those held by company executives or trainees, which interact with the differing interests of the other participants, and result in adjustment of goals as the program evolves.

In the discussion period Mr. Kobrak was asked whether he had looked at earlier models in other areas for help in analyzing group dynamics in manpower programs. Mr. Kobrak knew of some, but none in the education field; it was then suggested that he read The Educational Decision Makers which would be relevant to his work.

The final discussion centered on the potential for reconciling the different perspectives of econometrics and other economic as well as social and political disciplines to solve basic policy problems.

It was asked whether university researchers were selecting policy questions because of their significance or, rather, because they could be handled by high powered techniques developed in narrowly channeled university departments. The latter was said to be not uncommon. One suggestion during this discussion was that researchers exercise greater intra- and inter-disciplinary tolerance.